

DEFECT MANAGEMENT FOR HDD WITH VARIABLE INDEX ARCHITECTURE

ABSTRACT OF THE DISCLOSURE

A data stream received by a hard disk drive (HDD) is organized into at least one cluster having data blocks and spare data blocks and that is equal in size to an integer multiple of the number of sectors in a track of a disk of the HDD. A variable-index writing technique is used to write each data block of a cluster to a corresponding sector of a track that is encountered by a head when the sector is not defective. A sector of the track is skipped during writing when the sector is defective. The number of spare data blocks in a portion of a cluster corresponding to a single track is reduced by the number of sectors that are skipped in the track so that the number of data blocks plus the number of remaining spare data blocks equals the number of sectors in a track.